Figure 1: Predicted protein sequence of mGγ12 (SEQ ID NO:1)

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1   MSSKTASTNS IAQARRTVQQ LRLEASIERI KVSKASADLM SYCEEHARSD

51  PLLMGIPTSE NPFKDKKTCI IL*
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Figure 2: cDNA sequence of mGγ12 variant 1 (SEQ ID NO:2)

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   1   CTAGAATTCA GCGGCCGCTG AATTCTAGGC GACGACGGCG AAGAGTGAGT

  51   GCCAAGGTTC ATATGGGAAG GACTTTGGGG TGAGCATCTT CTCTATTTCC

 101   AGCTGGCTTT TCTGATTTTC AGAAAGAAGA CTCATCAAAG ATGTCCAGCA

 151   AGACGGCAAG CACCAACAGC ATAGCCCAAG CCAGGAGAAC TGTGCAGCAG

 201   CTGAGATTGG AAGCCTCCAT CGAAAGAATA AAGGTCTCAA AAGCATCAGC

 251   AGACCTGATG TCATACTGTG AGGAGCATGC CCGGAGCGAC CCCCTGCTGA

 301   TGGGCATACC GACCTCAGAA AACCCGTTCA AGGATAAGAA GACCTGCATC

 351   ATCTTATAGT GGACCAGGAA GCGCCCCTTG CCTCTTAACG CAAACCACAG

 401   CAGCAACCTG AAGGGATTCC TTCAGCTTAC CTGGTAACCA CAGCTAGTAA

 451   CTAAAACACC CTTCTCTCGG AATAATAGAC CCTGAAGTCT CTCTTTTTCA

 501   AGTTGTCCTT TCTTCACCCT TTACTGATTT AATACAGAAT AACAATCTTA

 551   TTTTCTATTT GATAACTATG GTATCATATT GGGTTACTGT ATAAGGAAAA

 601   TGGCAGGGGA GTTGTGGGAA GCTTGTCTTT ACAAAATATA ATTGATTAAG

 651   ATATGTCAAG ACCTACATTG TCTAAGCACC GGCAAATTAA AATGTCGAGA

 701   ATCACTTCAG TCAAAAACCT TTATATTCTG TTCTTAATAA TGTTTGTGCC

 751   AACCTATATC CCATGTAAGG GATCTGGGGA GGAGGCATGT GTCTACAACC

 801   ATACCTTTTT GCACTATGGG CACTAACCAC CCTGAAACTT CCTGCGGTAG

 851   CTCCCTCCCT TCAGAGTTAC ATCATTATCC TGACTCTGTG TAGGTAAATT

 901   TCCGTGAAAT TTTTGTACAA AAAAAAGGTA ATGAAGAAC GTTGCAAAGA

 951   TCATCTGCAT TATAATGAGT TGATGCTGTT CTCACTCCTC TCTTGGAATT

1001   GTGCTGGCCC CTTAGTCTAC AATAAACTGT GCCAATTAAA AACCTAAGGC

1051   TAAAACTGAA AGCCCTTTGA TGGGGTCTTA ACTCATATCA GTCATTTGGG

1101   CTTCTCTGAT CCTGAGGCTA AGAAGGGGA AGAGACCCTC AGGAGGCAGC

1151   TTCCACTCCA GGGCTCTTGA TCTCTGCTGG ATTGGGGGTG GCCACCTCAG

1201   AAACTTCCAC CCTCATGACT GGAATGGAAG AGGGGACCGA GAGCCTCACA
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1251  ATCTCGGAGA GGGAGGAGAA ATTCTTAAAA ACAGCTGCTC TCCTGCGCCC

1301  AGCTTCACAG GCAGCCCTGC CCCTTTCTCC TCACCAGCAT GGTACCTGCC

1351  CTTACTGCTA GAGCAGCTGC TTGTAGAGGG ACATTCCCTC CTTCCCAGTT

1401  TTAACTGGTG GACCACAGTG GGGGAAAAA CATTCAAGCG ATATAAAGAC

1451  ACTTGGGCTC TTTGCAGATG CCTATACTTC CAACACTACC ATGTCCACAA

1501  ACCACCCTGG GGGAGGGCCC TTCCAAAGGG AGGCTTGCTA GTTTCAGCGT

1551  CTAGCAGTTG GGTCCTCACT TTTACTCCAA TTGTGAAAAT AGCCCACGTA

1601  CCCTCGCAGT GTCCAGTAGG GATCCCAGAG GCACATAACC AAGAAAGGAT

1651  TTTGACTTTG TCACAGTGAC TATTTAAAAT AATCTATTCG AAGTCCAAAC

1701  CAAACACAAA GCCTGTGATA TTTTAGGTTA TTAAGGTAAC TGCTAATGAA

1751  GGATTTTAAA AAGTGTCCTC AAAAAGGACT TAGCCCCGGG AGTTGTTTAT

1801  AAAATTTCCC CCACTTGTAT ACAGTGTGCA CTAAAGAAA ATGTATTTTA

1851  ATATCTAATG CCTGGGCTCT GAGCGTCATG CTTCTTGGTG GTAAACATGC

1901  AGTCCTGTTC CTAAGTGACT CAGAGGCATC AGAATTTCTC CACGTTACCC

1951  ATCTGCTTGG CACTCGGAAC TGAGCGTGTG AAATCCATAG CGCTGCCCAC

2001  AACCTGTTCT CACTGCTTAG CTCCCAGCTG GATTAAAGAC ACCTGCTCAG

2051  GCGGGAGAGA GAGAGAGAGA GCGAGCTTTT ACCTTGGAAA AGGTAAAGAT

2101  GGAAATGTAC ACCAAAAAAG ACAATTTTTA CATTTAATGG AACATTCTTT

2151  TTTTTTACAA GTATATTTTT CTACTGATAG TTTCAGAACA CTAATCTTAT

2201  ATTCACTCTA ATCTTAAACA TGTTTCTTTA AATATTTATA AGGCAGTTTA

2251  TTACAGAATA TTTTCATGCA ATCATGTGCA CATTATTGGT AGCAAACATA

2301  GTATATCCTT TAGTACTTTA GCATATTTTT GTTAAAATAC TTTTAATGGT

2351  AAGAAATGAA CTTGAGGTCC CAGGAGGTTT TGTTGCCTTT TCATTGATTA

2401  GAGACAATAA ATATCTTGTA ACTTCCTAAC CAGATCTGAG CTGTGCTCAC

2451  AATAATAATA ATGAAATCAG ATTCTTTGAT GCTGGACTCA GGAGGGAAAT
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2501   CATTAGCCAA CTGTTGACTT ACTTATAGCT AGATGTCTAT GTGAGAAAGT

2551   ATAATATATA TATATACACA TATATATGAC ATGTAAGAGT CACTTTTATT

2601   TATCTGTCTT TGTTCACTTA TGAAGCCGGT AACTGCAGCA GTATGTTGGT

2651   GATGTCATGA TGCACAGAAG TCCCATGTGG AGTGTTTTTC CCACACTGAC

2701   AACTTGGCCT CCTTTCTGTG TGTTCAGTCT GTTGTCTGAA CTAACACTCC

2751   CGCGAGCACT ATACTCTTTA TACTCTGATC CCCCTAGTTC ATCTTAAATT

2801   TGTCTGTGGC CCTGGCAAGA TAGCGTACAC AAGATTCCAT GACTCCAGAG

2851   CATCTTGAAG AAACATACAT ATTTTGAAAG AGGGAAATG TAGCAGATAG

2901   TTCACAAGCT GCGGGTTGTA GCTAAATATT CCATTTCTTT GAAATCATGT

2951   TTCTAAATTC TTTACCATCA GAAAGAAAAG GAGTGTCATA CACTTTCAAG

3001   GGAAGGCTTG GTCTGCGTTT TCTGTGTTTG GATTATTTTT ATACTTTGCT

3051   GATCTTTAAG CTATCCATGG GGGAAATTTT ATACCAACGA GTTAATAATT

3101   CTCATTCATC GTTTACACAA TGTAACATGT GTCATACTGG GGCCAGCGAG

3151   ATGGCTCAGT AGGTAAAGGT GCTTGATGCT AAGCCCGGCA GCCTGTGTTT

3201   CATCTACAGG ATGCACAACA TAAAAGAAAA GATCTGATTC CCACAGGTTC

3251   TCTTCTGACC TACACACACA CACACTAAAA TAACATTTAA AAATATGTGC

3301   CAAATTATAT TTGTTCGGGT GCCACCTTCC ACCAGCTTAC CACTACGGTA

3351   GAACTGTCAA ATTCATCTCC CTGAATTTGT CTTAAAGGGG TGTCCATGCA

3401   CAGGCCCAAG AGTCACCTCC AATGAAATAA ATGTAATACT GAAGTATGCC

3451   ATGATGTTTG TTGTTTTCTT TCATCGTAAG CCTGTAAGCA GGAAAAATAC

3501   GTCAAATCAG ATAGAATAGA GCATTTACCA GTGGTCGATG GCCTGGTCAG

3551   TCCTGTGCCG GGTGACTTAG GACCAGGCAC GTCAGCTCTC TGAGCCTCCC

3601   CTTCCCTTGT TGTCACAAGG GAATAGAAGC AGAAGAAGCT GAGAGCCTCC

3651   CTATTCCCAG ATGCCCTGGT GGAATGACCT GCCTCTCTGC CGTTTCTGCC

3701   AACGTGTTGG TGCTATAAGC TGCTTCAAAT ACCAGTTTGT CTGTAGTGTG

3751   TACTCACCTA ATCACTTGTT ATCCAGTGCC TGTTCTAGGT TTATGGACTT
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3801   AACTATTTCT GTGATGTTTC ATTTTTAGCC ATGTTAACTC CTAACACATA

3851   TTCTCTTATG TCTCAGTAAA GTTTCATTTG ATAAGTTGTT GAGATTCTGT

3901   TATTTGATAA TATTCTTCGG CTGTCCATCC AGCATCTTAA TCACTTTAAA

3951   ACTGTGATTG TTATTTGCAA CTCTGTTCTT TGGAAAGAAT AAAAGCATTT

4001   TTTTTCACTT GCTAACATGC TCACAAATGT GAGAGAAGAG TCATTAAAAG

4051   CTTTACTTAC TGGGTCAGTG CGTCATTGAC TCCTTTCTGT GTTTTGCCCA

4101   ATAAATTAAT AAAAGACCAA AAAAAAAAA AAAAAAAAA AAAAAAA
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Figure 3: cDNA sequence of mGγ12 variant 2 (SEQ ID NO:3)

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   1   GCAGCGGCGG CGGCGGCGAC GACGGCGAAG AGTTCATATG GGAAGGACTT

  51   TGGGGTGAGC ATCTTCTCTA TTTCCAGCTG GCTTTTCTGA TTCACCCCAC

 101   CATTTAAAAC CTGGAGGCAC TGGGCCACAC AAAGCCTTGC TGATTTTCAG

 151   AAAGAAGACT CATCAAAGAT GTCCAGCAAG ACGGCAAGCA CCAACAGCAT

 201   AGCCCAAGCC AGGAGAACTG TGCAGCAGCT GAGATTGGAA GCCTCCATCG

 251   AAAGAATAAA GGTCTCAAAA GCATCAGCAG ACCTGATGTC ATACTGTGAG

 301   GAGCATGCCC GGAGCGACCC CCTGCTGATG GGCATACCGA CCTCAGAAAA

 351   CCCGTTCAAG GATAAGAAGA CCTGCATCAT CTTATAGTGG ACCAGGAAGC

 401   GCCCCTTGCC TCTTAACGCA AACCACAGCA GCAACCTGAA GGGATTCCTT

 451   CAGCTTACCT GGTAACCACA GCTAGTAACT AAAACACCCT TCTCTCGGAA

 501   TAATAGACCC TGAAGTCTCT CTTTTTCAAG TTGTCCTTTC TTCACCCTTT

 551   ACTGATTTAA TACAGAATAA CAATCTTATT TTCTATTTGA TAACTATGGT

 601   ATCATATTGG GTTACTGTAT AAGGAAAATG GCAGGGGAGT TGTGGGAAGC

 651   TTGTCTTTAC AAAATATAAT TGATTAAGAT ATGTCAAGAC CTACATTGTC

 701   TAAGCACCGG CAAATTAAAA TGTCGAGAAT CACTTCAGTC AAAAACCTTT

 751   ATATTCTGTT CTTAATAATG TTTGTGCCAA CCTATATCCC ATGTAAGGGA

 801   TCTGGGGAGG AGGCATGTGT CTACAACCAT ACCTTTTTGC ACTATGGGCA

 851   CTAACCACCC TGAAACTTCC TGCGGTAGCT CCCTCCCTTC AGAGTTACAT

 901   CATTATCCTG ACTCTGTGTA GGTAAATTTC CGTGAAATTT TTGTACAAAA

 951   AAAAGGTAAT GAAAGAACGT TGCAAAGATC ATCTGCATTA TAATGAGTTG

1001   ATGCTGTTCT CACTCCTCTC TTGGAATTGT GCTGGCCCCT TAGTCTACAA

1051   TAAACTGTGC CAATTAAAAA CCTAAGGCTA AAACTGAAAG CCCTTTGATG

1101   GGGTCTTAAC TCATATCAGT CATTTGGGCT TCTCTGATCC TGAGGCTAAG

1151   AAAGGGGAAG AGACCCTCAG GAGGCAGCTT CCACTCCAGG GCTCTTGATC
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1201   TCTGCTGGAT  TGGGGGTGGC  CACCTCAGAA  ACTTCCACCC  TCATGACTGG

1251   AATGGAAGAG  GGGACCGAGA  GCCTCACAAT  CTCGGAGAGG  GAGGAGAAAT

1301   TCTTAAAAAC  AGCTGCTCTC  CTGCGCCCAG  CTTCACAGGC  AGCCCTGCCC

1351   CTTTCTCCTC  ACCAGCATGG  TACCTGCCCT  TACTGCTAGA  GCAGCTGCTT

1401   GTAGAGGGAC  ATTCCCTCCT  TCCCAGTTTT  AACTGGTGGA  CCACAGTGGG

1451   GGGAAAAACA  TTCAAGCGAT  ATAAAGACAC  TTGGGCTCTT  TGCAGATGCC

1501   TATACTTCCA  ACACTACCAT  GTCCACAAAC  CACCCTGGGG  GAGGGCCCTT

1551   CCAAAGGGAG  GCTTGCTAGT  TTCAGCGTCT  AGCAGTTGGG  TCCTCACTTT

1601   TACTCCAATT  GTGAAAATAG  CCCACGTACC  CTCGCAGTGT  CCAGTAGGGA

1651   TCCCAGAGGC  ACATAACCAA  GAAAGGATTT  TGACTTTGTC  ACAGTGACTA

1701   TTTAAAATAA  TCTATTCGAA  GTCCAAACCA  AACACAAAGC  CTGTGATATT

1751   TTAGGTTATT  AAGGTAACTG  CTAATGAAGG  ATTTTAAAAA  GTGTCCTCAA

1801   AAAGGACTTA  GCCCCGGGAG  TTGTTTATAA  AATTTCCCCC  ACTTGTATAC

1851   AGTGTGCACT  AAAAGAAAAT  GTATTTTAAT  ATCTAATGCC  TGGGCTCTGA

1901   GCGTCATGCT  TCTTGGTGGT  AAACATGCAG  TCCTGTTCCT  AAGTGACTCA

1951   GAGGCATCAG  AATTTCTCCA  CGTTACCCAT  CTGCTTGGCA  CTCGGAACTG

2001   AGCGTGTGAA  ATCCATAGCG  CTGCCCACAA  CCTGTTCTCA  CTGCTTAGCT

2051   CCCAGCTGGA  TTAAAGACAC  CTGCTCAGGC  GGGAGAGAGA  GAGAGAGAGC

2101   GAGCTTTTAC  CTTGGAAAAG  GTAAAGATGG  AAATGTACAC  CAAAAAAGAC

2151   AATTTTTACA  TTTAATGGAA  CATTCTTTTT  TTTTACAAGT  ATATTTTTCT

2201   ACTGATAGTT  TCAGAACACT  AATCTTATAT  TCACTCTAAT  CTTAAACATG

2251   TTTCTTTAAA  TATTTATAAG  GCAGTTTATT  ACAGAATATT  TTCATGCAAT

2301   CATGTGCACA  TTATTGGTAG  CAAACATAGT  ATATCCTTTA  GTACTTTAGC

2351   ATATTTTTGT  TAAAATACTT  TTAATGGTAA  GAAATGAACT  TGAGGTCCCA

2401   GGAGGTTTTG  TTGCCTTTTC  ATTGATTAGA  GACAATAAAT  ATCTTGTAAC
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2451    TTCCTAACCA GATCTGAGCT GTGCTCACAA TAATAATAAT GAAATCAGAT

2501    TCTTTGATGC TGGACTCAGG AGGGAAATCA TTAGCCAACT GTTGACTTAC

2551    TTATAGCTAG ATGTCTATGT GAGAAAGTAT AATATATATA TATACACATA

2601    TATATGACAT GTAAGAGTCA CTTTTATTTA TCTGTCTTTG TTCACTTATG

2651    AAGCCGGTAA CTGCAGCAGT ATGTTGGTGA TGTCATGATG CACAGAAGTC

2701    CCATGTGGAG TGTTTTTCCC ACACTGACAA CTTGGCCTCC TTTCTGTGTG

2751    TTCAGTCTGT TGTCTGAACT AACACTCCCG CGAGCACTAT ACTCTTTATA

2801    CTCTGATCCC CCTAGTTCAT CTTAAATTTG TCTGTGGCCC TGGCAAGATA

2851    GCGTACACAA GATTCCATGA CTCCAGAGCA TCTTGAAGAA ACATACATAT

2901    TTTGAAAGAG GGGAAATGTA GCAGATAGTT CACAAGCTGC GGGTTGTAGC

2951    TAAATATTCC ATTTCTTTGA AATCATGTTT CTAAATTCTT TACCATCAGA

3001    AAGAAAAGGA GTGTCATACA CTTTCAAGGG AAGGCTTGGT CTGCGTTTTC

3051    TGTGTTTGGA TTATTTTTAT ACTTTGCTGA TCTTTAAGCT ATCCATGGGG

3101    GAAATTTTAT ACCAACGAGT TAATAATTCT CATTCATCGT TTACACAATG

3151    TAACATGTGT CATACTGGGG CCAGCGAGAT GGCTCAGTAG GTAAAGGTGC

3201    TTGATGCTAA GCCCGGCAGC CTGTGTTTCA TCTACAGGAT GCACAACATA

3251    AAAGAAAAGA TCTGATTCCC ACAGGTTCTC TTCTGACCTA CACACACACA

3301    CACTAAAATA ACATTTAAAA ATATGTGCCA AATTATATTT GTTCGGGTGC

3351    CACCTTCCAC CAGCTTACCA CTACGGTAGA ACTGTCAAAT TCATCTCCCT

3401    GAATTTGTCT TAAAGGGGTG TCCATGCACA GGCCCAAGAG TCACCTCCAA

3451    TGAAATAAAT GTAATACTGA AGTATGCCAT GATGTTTGTT GTTTTCTTTC

3501    ATCGTAAGCC TGTAAGCAGG AAAAATACGT CAAATCAGAT AGAATAGAGC

3551    ATTTACCAGT GGTCGATGGC CTGGTCAGTC CTGTGCCGGG TGACTTAGGA

3601    CCAGGCACGT CAGCTCTCTG AGCCTCCCCT TCCCTTGTTG TCACAAGGGA

3651    ATAGAAGCAG AAGAAGCTGA GAGCCTCCCT ATTCCCAGAT GCCCTGGTGG

3701    AATGACCTGC CTCTCTGCCG TTTCTGCCAA CGTGTTGGTG CTATAAGCTG
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3751    CTTCAAATAC CAGTTTGTCT GTAGTGTGTA CTCACCTAAT CACTTGTTAT

3801    CCAGTGCCTG TTCTAGGTTT ATGGACTTAA CTATTTCTGT GATGTTTCAT

3851    TTTTAGCCAT GTTAACTCCT AACACATATT CTCTTATGTC TCAGTAAAGT

3901    TTCATTTGAT AAGTTGTTGA GATTCTGTTA TTTGATAATA TTCTTCGGCT

3951    GTCCATCCAG CATCTTAATC ACTTTAAAAC TGTGATTGTT ATTTGCAACT

4001    CTGTTCTTTG GAAAGAATAA AAGCATTTTT TTTCACTTGC TAACATGCTC

4051    ACAAATGTGA GAGAAGAGTC ATTAAAAGCT TTACTTACTG GGTCAGTGCG

4101    TCATTGACTC CTTTCTGTGT TTTGCCCAAT AAATTAATAA AAGACCAAAA

4151    AAAAAAAAAA AAAAAAAAAA AAAAA
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Figure 4: amino acid sequence of human Gγ12 (SEQ ID NO:4)

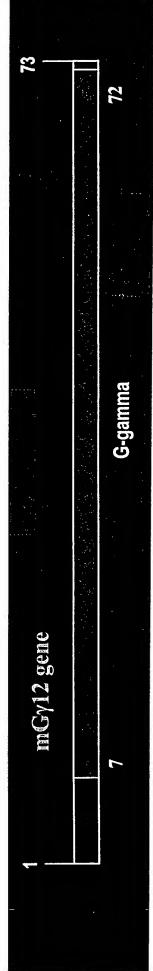1. MSSKTASTNN IAQARRTVQQ LRLEASIERI KVSKASADLM SYCEEHARSD
51. PLLIGIPTSE NPFKDKKTCI IL

FIGURE 5